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The Content of a Free Reading Program

By LOU L. LABRANT

WITHIN the last few years heated discussion has centered around the question of free reading for high-school students in English classes. Critics have insisted that interest as a basis for book selection merely tends to establish poor taste; they have stressed the importance of organization in reading as in any program; they have assumed that free reading, with its emphasis upon pupil-direction, lacks content. Indeed, the arguments in slightly more abstract form are those frequently advanced against any program in whose construction pupils participate, and have been offered as criticism of the whole progressive-school movement. Perhaps the basic misunderstanding comes from careless use of the term "interest." An interest is not an entity, unchangeable, fixed. It is merely a way of behaving at a given time, and may be modified, directed, developed, or discouraged. The important matter for the educator is to realize that interest means a strong tendency to behave in a certain way, and to understand that that tendency has driving power which is better used than thwarted. Moreover, interests are not unmixed. A combination of elements makes up an interest. Perhaps a child likes the stories of Zane Grey. Many factors are involved: simplicity of style, a picture of outdoor living, opportunity to participate in a primitive society, simplification of moral situations, brevity, excitement. It is possible that Grey's exact combination is required to satisfy a certain need on the part of the particular child, but it is not probable. Moreover, this attitude toward a given book or writer is only one of many complex interests which the child has, from which an abundance of combinations may be made. It is the teacher's responsibility to understand these interests, and to see that they are so combined and so

directed that new and more valuable experiences will develop. Thus the use of interest in guiding reading should mean a constantly growing understanding, which involves the wholehearted activity of the child.

The argument that the free reading program lacks organization, which is important in development, assumes that freedom negates purpose. It is true that the organization may differ widely from the peculiar organization of conventional courses. Much of the argument on this point, however, seems to be based on an assumption that there is one pattern only in which knowledge can be organized, and that pattern the one the present adult generation has known. The student, or the class, reading widely but concerned with a group plan and group discussion must, for very existence, organize the materials used; but that organization is real, not artificial. In the past, for example, we have been satisfied to offer chronological studies to high-school pupils, regarding such courses as "organized" and disregarding the fact that mere chronological sequence is a slender line between, let us say, the glamour of *As You Like It* and Milton's sonnets. In the mind of the average high-school student there is more real relationship between Shakespeare's plays and popular movies, or between Shakespeare's sonnets and those of Edna St. Vincent Millay.

The charge that experiences in which students work out their own problems lack "content" is also offered. Again there is the probability that the adult who makes such a charge is meaning that the content is not the content he learned. Pupils can scarcely think and work actively over nothing. A recent visitor in the writer's class, observing a group of thirty students as they discussed the relation of the movies they had seen to current legitimate plays on Broadway offered such a suggestion. "This is interesting and doubtless valuable," he said. "But don't you have any *content*?" One assigned play he could have seen as "content"; thirty different plays, chosen for a common purpose, he failed to recognize at all.

At the Ohio State University School reading, or the study of literature, develops as an inherent factor in the entire school program. Consequently, in the upper grades where two or three periods per week are assigned to "English," the material considered includes reading essential to the pupil's total

development, whether that reading be in general books on science, social problems, drama, art, or in books most frequently recognized as literary types. Classes consider the whole field of reading, and work out group study and discussion around common problems of development. There is no assignment of books or pieces for uniform study except in rare cases where an entire class feels the need for introduction to an unfamiliar form or type. There is constant demand that the individual pupil contribute from his experience, and in consequence emphasis is placed on understanding and careful interpretation. In addition to this emphasis on careful reading, from time to time classes make inventory of group development, setting up common criteria for judging.

Recently an attempt was made to evaluate the free reading of one class (graduated June, 1935) in the light of a three-year record.[1] Fifty-nine pupils, 26 boys and 33 girls, with an average yearly enrollment of 57, made up the group. The study concerns the content, the organization, and the resulting drives in the free reading of this one class in the Ohio State University School. The class entered the tenth grade of the school in October, 1932, when the high school was organized. Pupils, therefore, had one year of formal instruction prior to work in the University School, but since they represented a number of schools and many teachers, there was little uniformity about their background. During the tenth year and a part of their eleventh they were given some work by a teacher especially interested in speech and dramatics. Consequently with her they emphasized the reading of the drama. Their other work in English was under supervision of a single teacher, the writer of this report. With neither teacher was there ever a uniform reading assignment for an entire class, however; and diversified reading was always a part of the pupil's program regardless of the particular class unit of a given period. In brief, the units organized were set around the following general topics: How does drama differ from other forms of literature, and what is its contribution? What constitutes a plot in a novel or play, and what kinds of solution do authors offer? How does one

[1] Detailed presentation of the study, including a list of all titles read by the class during the three-year period, is found in *An Evaluation of the Free Reading in Grades Ten, Eleven, and Twelve for the Class of 1935, the Ohio State University School*, by Lou L. LaBrant (Columbus, Ohio: Ohio State University, 1936. Graduate School Series, Contributions to Education No. 2).

read successfully the less familiar types of literature—poetry, the essay, the short story? What is the placement of various individual writers, or groups of writers, in a chronological picture?

In every step, it should be noted, pupils began with a large experience which they found meaningful, and from that derived detailed understanding of important elements. From a wide reading of novels, for example, they developed the concept of a plot as a conflict, the solution as an author's interpretation of the forces in that conflict and his belief as to its natural end. Pupils thus became critical of both plots and solutions, and set up for themselves standards for judging books. One pupil's comment on a book illustrates: "The author does not solve the problem honestly, but uses an accident. I found the characters and setting so interesting, however, that I enjoyed the book even though I recognized its insincerity."

The joint processes of analysis and synthesis are seen in the work of the twelfth year, when pupils insisted on seeing their intensive, individual units within a chronological setting which all assisted in formulating. That such a succession of meaningful experiences could be thought of as lacking in "content" is absurd. There was, it is true, no teaching of techniques as an end, no unit on the sonnet, no history of English or American literature. Voluntarily, the class spent three weeks in the twelfth year on reproducing Elizabethan dramatic scenes, singing Elizabethan music, and reading excerpts from a variety of Elizabethan lyric and dramatic writers for class enjoyment as an element in making the chronological approach more vivid. In brief, while there was organization, it was not the organization of the conventional program, and was not set up in advance of pupil understanding and need.

THE study lists 1,947 titles reported by the 59 students. These titles represent 3,974 readings of complete volumes, and are classified according to the following divisions: biography and autobiography, drama, essays and other prose discussion, narrative fiction, poetry, science, and social science and history. An additional classification is provided for books read in French. The books are further classified as to nationality and period of author, time and place of the setting. This classification follows roughly criteria set up by pupils for judging

their individual reading programs:

Is my reading varied as to types?
Is my reading varied as to subject-matter?
Is my reading varied as to nationality?
Is my reading varied as to time?

Analysis of the pupils' records thus classified shows many interesting trends. While during the tenth grade 73 per cent of the total recorded volumes was narrative fiction, this type dropped to 34 per cent of total reading in the twelfth grade. Its place was taken by increased reading of drama (which increased from 7 to 24 per cent), essays, science, and poetry (which made another marked gain, 4 to 12 per cent). Biography and autobiography continued as an important but by no means dominant element (9, 11, and 8 per cent).

American and British authors continued to dominate pupils' reading, as might well be expected, maintaining respectively 52 and 27 per cent of the total volumes. Approximately 20 per cent of the total program was thus read in translation. These figures must be considered in relation to the change in type, however. That is, while books written in English occupied almost 80 per cent of the pupils' reading, the quality of these choices changed markedly. Pupils showed a consistent but less marked interest in the American and English scene. In the tenth grade 36 per cent of books read were set in America, 20 per cent in England; in the twelfth grade these percentages were 31 and 19, respectively. Again it is interesting to note that approximately 70 per cent of the pupils' reading carried them into foreign cultures. Drama is especially valuable in this development, over 80 per cent of the plays read during the twelfth year being by European writers.

In general, pupils preferred the modern writer, over half the books read (52, 56, 60 per cent for the three years, respectively) being written in the 1920–35 period. Availability of books may well have been a factor here. Interest in poetry and drama apparently encourages reading of modern writers of these forms. Growing interest in social problems appears also to stimulate reading of current books. While less than a third of the total books read have modern settings, there was somewhat increased concern with the contemporary scene (18, 28, 34 per cent). Nine per cent of the twelfth-grade reading was written before 1400; ten per cent was set before 1400.

Of the 1,947 titles, only 161 were read by five or more pupils; only 31 had as many as ten readers. Those who fear for the fate of classics on a free reading program may be relieved to find among the 161 most popular writers the following: Austen, Bennett, Blackmore, Samuel Butler, Conrad, Dickens, Dostoevski, Eliot, Goldsmith, Hardy, Hugo, Omar Khayyam, Pushkin, Shakespeare, Sheridan, Thackeray, Tolstoy, Vergil, Villon, Voltaire, Whitman, along with such eminent moderns as Andreyev, Barrie, Cather, Chekhov, Dickinson, Drinkwater, Galsworthy, Hamsun, Huxley, Kipling, Lagerloff, Lewis, Masefield, Maugham, Maurois, Merejkowski, Millay, Noyes, O'Neill, Pirandello, Robinson, Rostand, Sandburg, Shaw, Soule, G. Stein, Strachey, Suckow, Synge, Undset, Wells, Wharton.

Sex differences are evident, although reasons are not suggested. The girls read twice as much as the boys, with especial interest in drama and poetry. Neither boys nor girls, however, showed the strong interest in romantic fiction, hero stories, and adventure so commonly attributed to adolescents.

The theory that in a free or extensive reading program designed to utilize interest and to serve individual needs there will be fruitless reading of light fiction gains no evidence from this study. The report does, however, point to the possibility that the adolescent has much greater power to read and to think intelligently about reading than the results of our conventional program have led us to believe. [Vol. XVI, No. 2]

Retention in High-School Chemistry

By F. P. FRUTCHEY

Few studies of pupil achievement are carried beyond the completion of the course. How much of the achievement during the course remains after a period of one, two, or more years? What kinds of learning are retained longer than others? Do boys retain certain learnings longer than girls? Are there further gains in some learnings from year to year; are there losses in others? These questions have often been raised in the discussions of teaching, but little has been done to

answer the questions with impartial evidence. Studies of these questions usually have been concerned with the information the pupils remember. Such studies showed that within a year after completing the course considerable forgetting had taken place. Some studies have been concerned with other outcomes besides information. Studies in the Department of Zoölogy at Ohio State University showed that the percentage of retention varied with the objectives.[1] Specific facts were forgotten more rapidly than more general facts, and more general facts were forgotten more rapidly than general types of learning. In the ability to apply facts and principles in solving problems there was no loss, while in drawing inferences from data there was a gain. In a study of retention in general science at the high-school level, Tyler found that within a year after completing general science the pupils retained relatively little information but in explaining natural phenomena and in drawing inferences their retention was high.[2] During the summer of 1934, three high-school teachers became interested in the problem of retention of achievement in the objectives of high-school chemistry.[3] A co-operative study was planned whereby the data were pooled, and the results of the whole study and of each school were furnished each of the three teachers, respectively. Although the percentage of retention varied with the schools, this report is concerned only with the results of the whole study.

THE five objectives of high-school chemistry chosen for study were: the selection of chemical facts; the application of chemical facts and principles; a knowledge of chemical terms; a knowledge of symbols, formulas, and valence; and the balancing of chemical equations. Each of these objectives was defined in terms of the behavior of pupils, and tests were prepared to get evidence of each type of behavior. The test of selection of facts consisted of a list of facts, general ideas, and misconceptions about topics in chemistry. The pupils were expected to select those which are true about each topic. The

[1] Tyler, R. W. "Permanence of Learning," With The Technicians, *Journal of Higher Education*, IV (April, 1933), pp. 203–204. Wert, James E. "The Retention of Achievement in College Zoölogy," Mimeographed Report, Bureau of Educational Research, Ohio State University, 1935.

[2] Tyler, R. W. "What High-School Pupils Forget," EDUCATIONAL RESEARCH BULLETIN, IX (November 19, 1930), pp. 490–92.

[3] C. B. Marquand, West High School, Columbus; Ira Canfield, Chardon High School, Chardon; and W. M. Davis, Chillicothe High School, Chillicothe.

test of the application of facts and principles consisted of problem situations; the pupils predicted probable answers of these problems and indicated the facts and principles of chemistry supporting their judgments. A knowledge of terminology meant that the pupils could identify the chemical term for each definition and description provided in a list. A test was prepared requiring this sort of behavior. Evidence of a knowledge of symbols, formulas, and valence was obtained by asking the pupils to write the names of elements for their symbols, the names of compounds for their formulas, and the valence of chemical elements in compounds. The fifth test consisted of

TABLE I

RETENTION IN PERCENTAGE OF GAIN MADE DURING THE COURSE

	Girls (22 to 36)*	Boys (45 to 62)	Both (67 to 98)
(1)	(2)	(3)	(4)
Selection of facts	64	93	84
Application of principles	93	91	92
Terminology	46	75	66
Symbols, formulas, and valence	65	73	70
Balancing equations	76	70	72
Total	67	87	81

* The number of pupils varies with the objectives; not all the pupils took the tests.

unbalanced chemical equations to be balanced by indicating the number of molecules of each substance needed.

The tests were given as pre-tests in September, 1934, when these pupils, as Juniors, were beginning high-school chemistry. This pre-test established the first point of achievement. Nine months later, in May, 1935, at the close of the year, the pupils were again given each of the tests, establishing a second point in their achievement in these objectives. The difference between these two points is the gain made during the course. Thus a basis was established against which to compare the gain or loss in achievement made during the year following the completion of the course. In May, 1936, one year after the pupils had completed their high-school chemistry, the tests were given to establish a third point in their achievement. The difference between the second point (final-test results) and the third point (retention-test results) was the loss or gain during this year. The amount of retention was the difference between the pre-test

results and the retention-test results. Hence, the amount of retention can be compared with the amount of gain made.

In Table I is shown the retention of the gain made during the course in each objective. For example, one year after completing the course, the pupils remembered 84 per cent of the gain they made in information during the course. In their application of facts and principles their retention was 92 per cent of the gain they made during the course. Of the five objectives, their retention in knowledge of chemical terms was lowest, only 66 per cent. If the retention of the pupils had been judged from a single score obtained by adding the results of all five tests, then the pupils would have been judged to have retained 81 per cent of their gain during the course. This procedure would have "ironed out" the discriminating differences in retention of each objective. Similarly, if only an information objective had been tested our conclusions about the retention of these pupils would differ from those made when other objectives are tested.

THE difference in retention between boys and girls was quite marked in some objectives. In the selection of facts, terminology, symbols, formulas, and valence the girls lost their progress more rapidly than the boys. In balancing chemical equations the boys lost their progress somewhat more rapidly than the girls. In one objective both boys and girls retained about the same percentage of their progress. It is interesting to note that this latter objective is the application of facts and principles, a more general type of behavior. It was in this objective, too, that the largest percentage was retained.

This study substantiates other studies of retention of achievement involving objectives other than information. There was a difference in retention in the different objectives. Retention was greatest in the more general types of behavior. Although there were sex differences in the retention of achievement in some objectives, in the application of facts and principles, a more general type of behavior, there were practically no sex differences in retention. If these results continue to be found, do they imply that those objectives in which achievement is relatively permanent, must be given much consideration.

Unit Costs in the Administration of a Standardized Test

By DOUGLAS E. SCATES

THE administrator who is thinking about giving standard tests to his school system faces a number of practical questions, not the least of which is the total cost of the undertaking. One may easily ascertain the publisher's price of the tests, but he will desire also to know how much it will cost to give, score, and interpret them. For example, will $1,000 be enough to put in the budget for testing three thousand pupils? And at that rate can special testers be hired? Will the teachers have to score the tests? If clerks are to score the tests, how much will it cost? And what can be done to make the results more intelligible to teachers, and more serviceable to the superintendents and principals?

The present article presents certain basic facts and unit costs to help the administrator answer such questions, and to aid him in planning his testing program. Figures are presented on the costs of giving the tests, scoring the tests, tabulating the results, and preparing a report for teachers and principals. The figures are based on a careful analysis of records kept on about ten thousand Stanford Achievement Tests given in the upper elementary grades. The costs reported will apply approximately to other test batteries which are similar, and should be helpful both in preparing a budget and in making plans as to what may be included in a testing program with the money that has been allotted to this purpose.

The present report will also be of help in estimating the amount to allow, when budgeting a testing program, over and above what would seem on paper to be reasonable unit costs. The additional amounts are made necessary by virtue of many factors which enter into the practical situation that are likely to be overlooked when one is planning abstractly. Brief descriptions are given for each phase of the work so that the costs will be more significant, for variations in what is attempted and in the method of doing it will cause basic changes in the costs. Unit costs which are not accompanied by such descriptions must be regarded as incomplete and of dubious utility.

The Stanford Achievement Test consists of ten subject-

matter tests, and these require three forty-five minute periods—a total of two and one-quarter hours of testing time. Usually the three test periods are spread over several days to avoid fatigue and to avoid too large an interruption in the routine of the school work at any one time.

In the present instance, the tests were given for survey purposes, and it therefore was regarded as somewhat desirable that they be given by someone other than the regular classroom teacher. As work progressed, a compromise plan was used, for the sake of economy. Principals were asked for co-operation, and a large proportion of the principals kindly volunteered to supervise personally the giving of the tests. For small schools this could readily be done, as a period of two weeks was allowed to complete the testing throughout the city. Some principals had teachers in their own buildings who were especially prepared to give tests, and they arranged to relieve these teachers of their regular work in so far as necessary. In a few cases, upon the principal's recommendation, specially trusted, highly professional teachers gave a test to their own classes, but this was not general, and was carefully restricted.

In the remaining cases testers were sent to the buildings. For this purpose recent graduates of the five-year training course at the University of Cincinnati, who were awaiting appointment as teachers, were used. These girls were given instructions and a demonstration in an actual classroom. They were paid the regular salary of substitute teachers, $6 per day. By careful planning, the testers could frequently get in four test periods of forty-five minutes in the morning and two in the afternoon. Occasionally only five test periods could be arranged in a day. In a few instances minor administrative shifts were made to aid in scheduling the test periods. Sometimes two or three classes were put together in a large room. In all cases where special testers gave tests, they remained in the room throughout the entire time pupils were working.

UNDER these conditions (six test periods per day, and a salary rate of $6) it costs $3 to give a Stanford Achievement Battery to a class group when a special tester was hired for the purpose. This is a cost of 8.6 cents per pupil if we assume an average class size of thirty-five. For estimating the cost of giving other tests that require a different length of time, it may

be interesting to think in terms of test hours. The cost per test hour, for a group, was $1.33; for an individual pupil (assuming thirty-five pupils to the group on the average) it was 3.8 cents.

These figures, however, are theoretical costs. In practice, the cost was found to be 9.5 cents per pupil, or 11 per cent higher. This increase reflects such factors as the following: a number of testers could not get in more than five test periods per day owing to school schedules, distance between schools, and other causes. Some of the schools had small classes; it required just as long to give them tests. An occasional irregularity in the school program on a special day wasted the tester's time. Some testers were hired by the hour, for only a part of the day, at a higher rate. Normally make-up tests for pupils absent one or two days were handled by classroom teachers, but in some cases absence was so great as to call for a second administration of tests in a school by a special tester. As a matter of fact, the practical costs would have run more than 10 per cent higher than the theoretical ones if it had not been possible in a few instances to combine two or three classes for testing.

A considerable reduction in the total cost was accomplished, as explained earlier, by having the principals give or supervise the giving of tests in cases where it was mutually satisfactory to them and to the central office. Actually, special testers were used in only 40 per cent of the cases, thus cutting the foregoing costs, for the city as a whole, to 40 per cent of those stated.

All test papers were scored in the central office by workers especially employed for this purpose. A staff of thirty undergraduate students from the University of Cincinnati was employed. Since the University of Cincinnati has a large number of its students on the co-operative system, whereby they go to school two months and work two months, it was feasible to secure these students for full-time work.

The work was laid out on the assumption that more and better work would be done by having the scorers work intensively for fairly short periods. Accordingly, their working day consisted of four work periods of one and one-half hours, making a total of six hours. There was a fifteen-minute recess in the middle of the morning and again in the afternoon, with one and one-half hours for lunch. The workers were paid for the two recess periods, and for Saturday afternoons.

A supervisor was employed to direct the scoring. She was a college graduate, of some experience in the business world, and used to having people work for her. Transparent stencils were prepared for the scorers, and careful instructions were given. Each scorer scored only a single one of the ten tests in the booklet, so that he could acquire greater efficiency than if he scored all of the ten different tests.

Approximately 10 per cent of the work of each scorer was checked each day, by selecting papers at random from his previous day's work. The number of errors made by him was posted on a large blackboard. Quantity records were also kept for each person. Two workers were dismissed because they were inaccurate even though working much more slowly than the rest; others were admonished, and a number were transferred from one test to another which required a somewhat different type of attention in scoring. These checks on the scoring not only located the weak spots in the work, but they aided materially in maintaining a feeling of responsibility for careful work on the part of each scorer.

THE scorers were paid $2.25 for a six and one-half hour day; when deductions in working time for recesses and for Saturday afternoon are made, the hourly rate was about 41 cents for net working time. The supervisor was paid $6 per day.

Rate-of-work test periods were held each day for over a week to ascertain the average "speeded" time necessary to score the ten different tests in the battery. These speed trials were in addition to records kept on the total output of each scorer each day. The rates of work shown in Table I are based on these speed tests, each rate representing the work of a number of different scorers. Variations between minimums and maximums are caused by different rates of scoring, different grade-levels of the pupils who took the tests, and different educational levels of different classes. Some classes in the lowest sections did almost nothing on some of the tests; their papers accordingly required very little time to score.

These rates, together with the rate of pay stated, indicate a scoring cost of approximately 11 cents per test booklet. These figures, however, are based on speeded work, and need correction for a number of incidental factors. When the total pay roll for scoring was divided by the number of tests scored, it was

found that the cost was 70 per cent higher than these rates would indicate—over 18 cents for each test booklet.

The factors comprising this additional 70 per cent of scoring cost are calculated or estimated to be approximately as follows: supervision, 10 per cent; checking on work, 10 per cent; normal rate of work, 35; miscellaneous duties, 15.

The cost of supervision and the 10 per cent checking were planned. Some relaxation in the normal rate of work, together with the necessary mechanics of moving about to get and return tests, occasional administrative delay, and the like, are esti-

TABLE I

RESULTS OF SHORT-PERIOD RATE-OF-WORK TESTS ON SCORING

Test	Average Time* (Minutes)	Minimum Time† (Minutes)	Maximum Time† (Minutes)	Scoring Cost‡ (Cents)
(1)	(2)	(3)	(4)	(5)
1	1.3	.6	2.9	0.9
2	1.3	.8	2.3	0.9
3	1.5	.6	3.2	1.0
4	1.9	1.2	3.6	1.3
5	2.0	1.0	3.3	1.3
6	1.7	1.0	3.7	1.1
7	2.0	.8	3.6	1.3
8	1.9	1.1	3.2	1.3
9	.9	.6	1.1	0.6
10	1.4	.8	2.5	0.9
Total	15.9*	8.5	29.4	10.6

* Time is reported decimally; for example, 1.5 means one and one-half minutes.

† Minimum or maximum for an average based on scoring same test in ten different booklets—not the minimum or maximum time of a single scoring.

‡ At rate of forty cents per hour.

mated to reduce the work rate to about three-fourths of that ascertained on the speed trials, thus requiring about a third longer to complete a given amount. "Miscellaneous duties" included such things as the following: preparing celluloid scoring stencils; time for instructions in scoring; coding the tests for school, grade, and class; copying scores on the front of the test booklet; adding the ten scores to get the total score, and checking 40 per cent of the adding; converting the total score into educational age; calculating chronological age from the birth date recorded; sorting the finished tests by school, grade, and class, and arranging alphabetically within each class; tying tests into bundles to return to each teacher. Summarizing

the costs reported thus far, we have the following: purchase cost per pupil, 8.8 cents; giving the test, 9.5 cents; scoring the test, 18.1 cents, making a total of 36.4 cents per pupil.

One may desire to do more than simply return the scored tests to the teachers. In the present instance it was decided to do as much as possible of the mechanics of tabulating for the teachers and principals so that they could begin with the tabulated results and give their attention immediately to interpretation.

Accordingly the following records were prepared for each teacher: First, a class record sheet showing for each pupil his chronological age, his educational age (derived from the total score), and his score on each of the ten tests comprising the battery; second, a class frequency distribution sheet, showing frequency distributions for the total scores, and for chronological ages; third, the class average (mean) and the standard deviation were given for each of the ten tests, for the total score, and for chronological age; fourth, similar frequency distributions for children of that same grade throughout the city as a whole, together with averages and standard deviations, were also given for each of the ten tests and for the two ages, for purposes of comparison.

In addition to these records for the teacher, a duplicate set was prepared for the principal, and frequency distributions for each of the ten tests and for the total score and chronological age were given to him for each entire grade in his school where he had more than one class per grade. Two other copies duplicated all of the foregoing sets for the teacher and for the principal; these were prepared for the use of the administrators and supervisors in the central office. Such records provided the persons most concerned with the essential information and permitted them to give all of their time to a study of the results. Further city-wide analyses were made for the use of the central office.

An interpretative handbook of 110 mimeographed pages was then prepared and given to each principal and teacher. This manual devoted some fifty-five pages to an analysis and interpretation of the results for the city as a whole; the second part, containing some thirty pages, was given to pointing out how an analysis could be made of the results at each school—but no

school was given the data for any other school; and the third part, some twenty-five pages, showed teachers how they could analyze and interpret their own class situation. In this work diagrams and illustrative distributions were freely used. Some twenty large charts were prepared for group discussion of the results with teachers.

THE cost of preparing the four copies of the complete records of what each pupil did on each of the ten separate tests, together with the four copies of the frequency distributions on total score and on chronological age for the pupils in each class, as well as the entire set of frequency distributions for each school-grade and for each city-wide grade, was 5.4 cents per pupil. This cost covers all the tabulating machine work, coding the twelve scores and ages on each test battery, punching the cards, proofing them, sorting, and listing or tabulating, together with the costs of specially printed forms, tabulating-machine cards, and incidentals.

The cost of calculating the twelve means and standard deviations for each class and for the grades in each school, and for the city-wide distributions, including special tabulating-machine runs made to aid in this work, was 2.8 cents per pupil.

As for the mimeographed report, the average cost per single copy was 40.7 cents if the total cost is divided among the number actually required; but about 40 per cent more copies were run to meet additional requests, and on this number the cost was 32.7 cents per copy. This cost included preparing stencils for 46 diagrams, 11 tables, and the balance of the 110 pages, together with actual mimeographing, assembling, binding, and the cost of the stencils, paper, and covers. In terms of the number of pupils actually tested, the cost of the bound reports was just 2 cents per pupil.

For the twenty charts (30 inches by 50 inches) a student draftsman was employed at $3.50 per day. The total cost, including cardboard, letters to paste on, and drafting, came to $3.50 per chart. This was slightly less than one cent per pupil.

The cost for general administration is included as a means of suggesting the total cost of the program—not in the sense of a special cash cost, but in the sense that this service, when devoted to the testing program, is necessarily taken from some other form of work that would otherwise receive it (*see* Table

II). The amount assigned is largely an estimate, since it is almost impossible to keep accurate records of the time of an administrator who is working on a number of different things at the same time. The cost covers the salary of the worker in the central office who directed the entire undertaking, the salary of a clerk or stenographer in so far as her services were used, and a few incidental expenses. For example, there were 25 mimeographed pages of directions for various administrative and technical purposes. The greater part of the charge for this

TABLE II

SUMMARY OF COSTS

	Theoretical Cost per Pupil (Cents)	Actual Cost per Pupil (Cents)	Allowance above Theoretical Cost (Per Cent)	Actual Cost per Class of 35
(1)	(2)	(3)	(4)	(5)
List price of test battery	8.0	8.8	10	$ 3.08
Giving the test battery*	8.6	9.5	10	3.32
Scoring tests, etc.	10.6	18.1	70	6.34
Cost of purchasing, giving, and scoring	27.2	36.4	34	$12.74
Statistical analysis and report of each class	.....	8.2	.....	2.87
Mimeographed discussion of results	.....	2.0	.....	.70
Charts for group discussion	.....	1.0	.....	.35
Total special cash cost	.....	47.6	.....	$16.66
General administration	.....	8.0	.....	$ 2.80

* This figure assumes that all tests will be given entirely by a special tester. In the present instance this cost was reduced to 40 per cent of these figures through a compromise.

service is accounted for by the technical direction of the statistical analysis on the tabulating machines, and by the actual preparation of the manuscript for the mimeographed report, together with the supervision of many details of the program.

It is to be understood that not all of the expenses reported here are necessary in every testing program. Many of these services could be dispensed with if funds did not permit rendering them. It is not the purpose of this report to justify the various services; it is merely the purpose to provide figures indicating what such steps have cost, as shown by carefully kept records, and what they are likely to cost again when a program is conducted as this one was.

EDITORIAL COMMENT

Two Types of Oral Reading

Oral reading may be classified in two types by the purpose which it serves. The commonly recognized type of oral reading is that in which the reader hopes to enlighten, if not to delight, an audience. Such reading lends itself to varying degrees of dramatic effort and is of necessity slowed up by the reader's effort to enunciate clearly and through somewhat exaggerated emphasis to reach and hold each listener's attention.

The second type of oral reading is not often recognized in the classroom. In this type of oral reading the listener is of no consequence; his function is to check on the reader's reading. In the higher grades, it should resemble closely in pitch, in clearness, and in speed the reading of a trained copyholder in a publishing house. There the characteristics of even tone, smooth phrasing, and correct pronunciation are important. Expression, usually so desirable in oral reading, is entirely discredited. The proofreader whose eye travels faster than the speediest copyholder's tongue becomes nervously distracted by the copyholder who infuses any dramatic quality into his reading.

The purpose of the second type of oral reading is to give the teacher a measure of the quality of the individual's reading power. It is difficult, if not impossible, to devise reading tests sufficiently diagnostic or calibrated in enough detail to give a true appraisal of the quality of any individual's silent reading. Does he confuse his auxiliary verbs *would, could, should?* Does he overlook small words like *a, the, may?* Does he read the "th" and "wh" words correctly, that confusing crew—*her, here, their, there, then, them, this, these, those, were, where, when, who, whom, whose*—which is the torment of every poor reader? Yet on conjunctions, prepositions, pronouns, adjectives, and adverbs the shades of meaning depend; in them is enshrined the subtlety of the content. When, for example, an inadequate sixth-grade reader read the sentence, "There may have been four glacier periods," omitting the *may*, and was then asked, How many glacier periods were there? he glibly replied: "Four." When told that the author of the science

book had not said that, he turned to the book with bravado to prove his tutor wrong, and found his assurance routed by the presence of *may*. The integrity of reading depends as much on the correct interpretation of auxiliaries, articles, conjunctions, and prepositions as on the nouns or verbs of greater length and less frequent appearance.

The teacher who is concerned with the quality of the reading of each of her pupils must learn to use this important and essential type of oral reading in which the audience should figure not at all. The pupil should read as softly as is compatible with the hearing of the teacher or the listening group of four or five equally interested classmates. Such softness of tone, through the relaxation of the speech organs, tends to lessen any emotional tensions which may accompany reading. Then too, since he is released from the responsibility of reaching and holding the attention of an audience, the pupil reads as rapidly as he can recognize the words; in the advanced stages of reading, as rapidly as he can speak. The teacher thus gains a knowledge of the degree of correctness with which the pupil reads; she can guage his understanding by his grouping of the words; and she can estimate his appreciation of the shades of thought through his recognition of the marks of punctuation.

From the first grade the teacher should distinguish between this studying type of reading in which she and a few pupils share at one time and the ordinarily acknowledged oral reading in which the pupil reads to be heard by others and understood by them. Even in the high school the teachers of various subjects should have at least occasional reading periods in which the students are guided in the mastery of vocabulary and understanding of meanings through this study type of oral reading.

J.H.M.

Review Courses

Students of the knotty admissions problems which college professors discuss with more heat than light are rather well agreed that if high-school graduates can read well and express themselves with facility, the high schools will have done their duty by the colleges. No other subjects or skills seem to be important except for engineers who need to know high-school mathematics. Unfortunately, this agreement is largely subjective because success in college is determined by class marks and

these have less reliability than we could wish. If college marks were more valid, selective admissions measures could in turn be made more discriminating. Then we could demonstrate to the satisfaction of everybody how important foreign languages, history, or mathematics taken in the high school are in establishing success in higher education.

The friends of Freshmen make a good case against high-school education in certain respects when they view it as a preparation for college. They point to the fact that the algebra and geometry that are required for college are usually completed at least two years before entrance to college, and so the student who passes these subjects forgets much of them during the interval. They also point to the fact that courses in English composition, oral and written, usually occur in the early years in high school, and fear that in the later high-school years the students slip when they are removed from the direct supervision of teachers of the subject, or at least do not continue to improve. There is an impression that the teachers of other subjects than English do not generally feel much responsibility for supervising the speech and writing of their students. They are said to take the position that mastery of content is their major responsibility and that English form is the responsibility of the English department. Friends of the Freshmen also note that too many of their protégés cannot read at the rate or with the comprehension that is needed in college. In fact, on occasion Freshmen are found who have no more than sixth-grade ability in reading, and sometimes these delinquents are brighter than the average Freshman.

It is agreed by everybody that preparation for college is not the major objective of secondary education. Most people accept the position that its primary function is to prepare for life and that the college should begin where the high school ends. Yet since nearly half of the graduates of high schools enter colleges, it is apparent that attention should be paid to them so that while they are preparing for life they should at the same time keep one eye on the four years of their lives which are immediately in front of them and tuck those skills into their programs which will promptly be useful. Especially would this seem to be true when these skills are as useful in life as reading and writing and talking.

[*Continued on page 56*]

READINGS

Books to Read

KANE, WILLIAM TERENCE, S. J. *An Essay toward a History of Education Considered Chiefly in Its Development in the Western World.* Chicago: Loyola University Press, 1935. xxi+637 pp.

The scope of this textbook is somewhat unusual in that it pays considerable attention to education in Spain and in Latin America. For this emphasis the author is well prepared by university training in Spain. In its space allotments the book also differs from the ordinary textbook. Almost a fourth of its space is devoted to current school organization and practice. Germany, France, Italy, England, Japan, Russia, and British America are treated. Less than forty pages deal with the history of education in the United States. Following an introduction there are chapters on primitive, Hebrew, and Greek education; about one-fifth of the book is devoted to Roman and medieval education; and due attention is given to the Renaissance and the Reformation, and to the older reformers, Locke, Vives, Comenius; something less than due attention is given to the evolution of 'democracy' (so written throughout). Pestalozzi, Herbart, Froebel, and Spencer are all put under this ambiguous, and to the author evidently invidious, heading. Dewey is omitted. The final chapter on "educational agencies other than schools" indicates a thought which frequently recurs in the book, that most of the influences which go to the making of a man are other than school agencies. The book deals with higher as well as elementary and secondary education.

The author's interests seem to tend toward the organization of schools, curriculums, and the social and moral effects of education rather than towards educational theory and methods. The standpoint of the book is, of course, Roman Catholic throughout. The author has been thorough in his reading, has ranged widely in his examination of the literature of his field, and has produced a volume which contains a great deal of matter that is not found in the ordinary textbook. Although intended for class use and modestly called an "essay," it is a work of real scholarship and should be ready by those who wish to deepen their information or who would be stimulated and irritated by its dicta into a re-examination of their views upon a multitude of minor and major matters.

H. G. GOOD

ULICH, ROBERT. *A Sequence of Educational Influences, Traced through Unpublished Writings of Pestalozzi, Fröbel, Diesterweg, Horace Mann, and Henry Barnard.* Cambridge, Massachusetts: Harvard University Press, 1935. x+91 pp. (Harvard Documents in the History of Education, Vol. III)

The nucleus of this book consists of five previously unpublished letters—one by each of the men named in the title, dated 1817, 1851, 1843, 1837, and 1894 respectively—the original manuscripts of which are in the Harvard College Library. The first three are reproduced in facsimile, in printed Ger-

man and in English translation. Due to an unfortunate error in proofreading, two sentences appear in the English version of Froebel's letter which are omitted from the German. In addition, certain writings of Charles Brooks, and extracts from a letter of Victor Cousin, not otherwise easily accessible, are reprinted.

The author has done a good job of placing these letters in their historical setting. They do "throw light on some details of the history of education . . . with respect to the cultural relations of the United States and some European countries in one of their most productive periods of thought." They do not, however, call for any important changes in currently accepted views. The book, therefore, is of interest to the research worker rather than to the general student of education.

R. H. Eckelberry

Payne, Fernandus, and Spieth, Evelyn W. *An Open Letter to College Teachers.* Bloomington, Indiana: Principia Press, 1935. xiii+380 pp.

Here is an effort to summarize for teachers and administrators a number of current main-line problems and trends in educational practices, philosophies, and outcomes at the college level. The authors, one a Hoosier dean and the other a New York professor, are not educators in the formal sense. They write with a minimum of technical jargon, a fine sense of dealing fairly with facts, and a commendable absence of finality in face of limited experimentation and dissimilar points of view.

In essence, the volume is an inquiry into what is wrong with college teaching and how to right it. It is scarcely a critique of teaching, except as one view is arrayed against another, yet it is more than a compendium of opinions and findings. Alleged faults and failures of college teachers are examined, as are teacher handicaps and training. Various newer plans are outlined, and lesser experimental methods are discussed. Problems in educating the superior student are set in contrast to those now current in dealing with the "ninety per cent."

Underlying the work as a whole is the conception of education as learning under guidance. Of particular interest to the reviewer was the chapter on how great teachers teach, President Wilkins' thoughtful letter on "Why Oberlin Is a Good College," and the final chapter on suggested changes for the improvement of teaching.

Lloyd A. Cook

Clarke, Eric Thacher. *Music in Every Day Life.* New York: W. W. Norton and Company, 1935. viii+11–288 pp.

To many Americans, music is one of the frills of life, an extra with which one can easily dispense. Eric Clarke ably tells us why as a nation we need music and what it should mean to the layman of America. There is much originality in this book since the lack of boresome statistics is noticeably apparent and quotations of what others think and have said are omitted. Parents who would choose a musical career for their children would do well to read this book, and young people imbued with a musical purpose in life should heed the advice given in this sensible and thought-provoking picture of the meaning of music. We are told that our greatest musical need in America is "a lack of music lovers" and that children need to be exposed to music early in

order that their innate musical faculties may be developed. This book should find its way to all library shelves and will prove invaluable to thinking people whether they are concerned with the problems of education or with living the life whose handmaiden is beauty.

JOSEPH A. LEEDER

SHROPSHIRE, OLIVE E. *The Teaching of History in English Schools.* New York: Teachers College, Columbia University, 1936. viii+189 pp. (Teachers College, Columbia University, Contributions to Education, No. 671)

This study has all the earmarks of a task thoroughly done. It is an old saying that the English were always so busy making history that they could not find time to teach it, and apparently the attitude toward history implied in this dictum still prevails to a considerable degree, though the battle for history in the elementary school seems to have been won. On the secondary level, however, in spite of the encomiums paid to history as history, as a school subject it is "barely respectable." According to one history master, history "makes boys fluffy-minded." One wonders what this master would say about the effect produced on our young people by the study of contemporary economic and social problems before they have had much experience with life or had acquired any sort of historical background. According to the time allotment for 1924, which presumably is typical, history ranked with drawing, manual work, and physical exercise, and stood as one to three in relation to both science and mathematics, and in the relation of one to four and a half to languages.

Making allowance for exceptions, it would seem that the English give more attention to the academic preparation of their teachers, and we give more attention to their professional preparation; each apparently could profit by taking on some of the emphasis of the other.

EDWIN W. PAHLOW

DOUGHERTY, JAMES HENRY; GORMAN, FRANK HERMAN; AND PHILLIPS, CLAUDE ANDERSON. *Elementary School Organization and Management.* New York: Macmillan Company, 1936. xx+53 pp.

This book, designed for those studying to become elementary teachers, is of value to the beginning teacher as well. In a conservative manner the authors have presented the recent viewpoints and techniques of school management and control.

Education welcomes the emphasis upon pupil management by means of self-control and the differentiation between judgmental and routine factors in educational practices. To show definitely the value of a mental-hygiene program for the teacher is a forward-looking step. Notwithstanding the seeming undue emphasis on academic values in some instances, the chapters on "Classification and Promotion" and "Administration of Reports and Records" point out some pertinent factors to be considered. Interesting sources of information are the discussions on objective tests and of a health-education program. Other commendable features to be mentioned are the concise and stimulating descriptions of the integrated child and the discussion of desirable traits for teachers.

Although the book contains a wealth of illustrations which are of material

help to the beginning teacher, more pertinent and varied illustrations would aid her to interpret the meaning of many general principles given. There is a potential danger that when principles are presented in a positive style, the teacher may regard them as patterns to be followed rather than as suggestions to be studied in the light of a clear unified philosophy of education.

PAULINE GASTON
Ottowa Hills School, Toledo, Ohio

BRISCOE, ALONZO OTIS. *The Size of the Local Unit for Administration and Supervision of Public Schools.* New York: Teachers College, Columbia University, 1935. xiv+110 pp. (Teachers College, Columbia University, Contributions to Education, No. 649)

The author has sought an answer to the old question concerning the optimum size of school districts. He bases his query on the need for each district "to secure skilled and continuous educational leadership, to use economically the time and services of the professional leadership employed, to provide adequate general control, and to use economically the money spent for general control, and in relation to the percent of its current expense used for general control." He defines the district in terms of the number of teachers employed rather than on the basis of geographical size or population.

In each phase already mentioned, he finds that about forty to fifty teachers is the smallest number which can fit this criterion. This is fortunate since it means that the answer to the whole question is the same; namely, that a district employing about forty or fifty teachers is the smallest efficient and economical unit.

The author has examined data from several different states, ranging from New England to the South, and with one western state, Illinois. This study will be useful to people who are faced with the problem of redistricting and is in general reasonably reliable, although one might question whether determining quality of leadership on the basis of a $3,600 salary is uniformly safe.

H. H. DAVIS

ROSENSTEIN, JUDA LOUIS. *Psychology of Human Relations for Executives.* New York: McGraw-Hill Book Company, 1936. xiii+284 pp.

The book begins with an account in nontechnical terminology of some of the general facts of psychology, drawing some of the illustrative material from industry. The discussion then turns more specifically to industrial problems such as discipline and motivation. The author appears most at home with the clinical type of problem. His suggested "program" for psychology in industry centers around maladjustment and its remedies. In the section where he raises the question, "What is there in psychology?" the answer seems to be "clinical procedures." Many will object to his statements that tests are useful mainly as an opportunity for the examiner to observe the subject and that quantitative aspects are to be minimized because they do not tell "how he did the problem." The possibility of validating a test by correlation procedures is not discussed. It would be well to give the executive to whom the book is directed at least a hint as to what an expert could do with a battery of tests in a regression equation.

Aside from the overemphasis of the qualitative aspect there is nothing in

the book with which the psychological reader will take exception. Occasionally there is an original and worth-while suggestion regarding some problem in industrial relations. A valuable feature is the collection of "problems for group study." These were submitted by department heads and might prove useful for discussion material in foreman-training courses and classes in business psychology.

HAROLD E. BURTT

GRIFFITHS, JOSEPH H. *The Psychology of Human Behavior.* New York: Farrar and Rinehart, 1935. xxi+515 pp.

The title of this book is somewhat of a puzzle to the reviewer. His first inference that we have here an attempt to crowd two catchwords into one title turned out to be inaccurate. The author really means to imply dualism of a sort. After he once gets under way and has left his philosophical introduction behind, he turns out an unusually creditable volume. The material generally treated in an objective textbook is vigorously presented in a way that indicates a long and sympathetic acquaintance with the things undergraduates want to know. Following the trend in the organization of the more successful newer books, learning and intelligence are set ahead of the usual place, and "sensing," "attending," and "perceiving" are set further back (the dynamic forms of the labels are the author's own). The anatomy of the nervous system is omitted, together with the physiology of the sense organs, with no ill effect on the clarity of the psychology. The summaries at the end of each chapter will be as useful to the students as they were to the reviewer.

WILLARD L. VALENTINE

BLATZ, WILLIAM E., AND POPPLETON, MARJORIE. *We Go to Nursery School.* New York: William Morrow and Company, 1935. Photographed by John M. Waterman.

MCCREADY, AGNES B. *A Day at School.* New York: E. P. Dutton and Company, 1936. Photographed by Ruth Alexander Nichols.

FOX MEADOW SCHOOL, STAFF OF. *Willingly to School.* Chicago: Scott, Foresman and Company, 1934. Photographed by Wendell MacRae.

Here are three books produced within the last three years by different publishers which together give a picture story of the modern way of education from the nursery school to high school.

The first contains pictures of children while attending the St. George's School for Child Study, University of Toronto. The activities of the day from the physical examination upon reaching the School to the farewell of Timmy, the spaniel, as the children leave at half-past two, give a continuous account of the variety of learning engaged in by the nursery-school child.

The day of the first-grade child is displayed in the second book. The pictures in this book were taken in the Longview Public School, Hackensack, New Jersey. The reading and number activities and the activities of the work period are shown in gratifying detail—gratifying because the uninitiated often fears that in the activity learning the three *R*'s are slighted and, also, is curious to know what is produced by the child in the work period.

In the third book "since the materials have been collected from the living of the children in the Fox Meadow School for several years, they represent normal life and not something set and staged." The pictures and comments

in the book are arranged about the following topics: getting acquainted, reinvestigating, outdoors, machines, fun, feelings, managing, hands, pets, and books. Under "hands," one finds pictures and descriptions of the electric bell wired by nine-year-olds, gardening, sketching, making models of prehistoric animals in well-packed snow, painting wall posters, cooking, and woodworking.

Parents will find these pictures informing and reassuring. Any teacher will find these books interesting, and students in the early months of their educational training will find them inspiring.

J. MacLatchy

Frederick, R. W., and Sheats, P. H. *Citizenship through the Social Studies: a Philosophy and a Program.* New York: Row, Peterson and Company, 1936. viii+312 pp.

The thesis here presented is that education for citizenship is crucially important, that it can no longer be expected as a by-product of fact learning, but must be sought directly, with all else in the social-studies curriculum made a means to that end. The definition of the good citizen is thoughtful and defensible. The proposed program seeks two fundamental objectives: arousing concern for the welfare of man, and developing in students the power to think, or to use the scientific method. Content, method, and appraisal must all contribute to these two ends, and will be selected accordingly, as the various chapters of the book demonstrate.

In the main, the program advocated is true to the purposes indicated. Some of the illustrative outlines seem weakest where they seek to develop attitudes and skills; the program is decidedly deficient in its consideration of the rôle of evaluation as an educative force. The choice of type-style by the publisher makes reading it so difficult that it must be mentioned, but here is a book of a type much needed. The authors have attempted to implement an educational philosophy with specifics, to give flesh to the Word. Their efforts merit consideration.

S. P. McCutchen

Carver, Thomas Nixon; Woolman, Mary; and McGowan, E. A. *Textile Problems for the Consumer.* New York: Macmillan Company, 1935. ix+175 pp.

Textile Problems for the Consumer, written by an economist, a textile specialist, and a textile teacher, is good, for it presents different points of view, all of which should be considered by the consumer of textiles. Its chief merit lies in its use as a reference book for organizations studying consumer problems. The content is rather elementary for the person trained in textiles and clothing. The material, however, is in a concise form for review by the teacher.

Some of the information such as the transfer of manufacturing from the home to the factory is so well known that it might have been replaced with a further discussion of the social consequences of this transfer on the consumer. The facts pertinent to the Recovery Plan, *NRA*, and codes are well organized and serve as a part of the history for the textile industry. Any one reading this book will get a good picture of the place of textiles in the cultural and economic life of our people.

While some of the laboratory tests included could not be performed by the layman and not by the expert without specialized equipment, it is valuable to know the kind and scope of these tests. Since many textiles are consumed for psychological value more than economic value, I think more emphasis could be placed on an analysis of these values. There is a psychological approach in the part written by the economist, but it could be more complete.

EUNICE RYAN

BRUNSCHWIG, LILY. *A Study of Some Personality Aspects of Deaf Children.* New York: Teachers College, Columbia University, 1936. xi+143 pp. (Teachers College, Columbia University, Contributions to Education, No. 687)

This study is a conscientious and scholarly attempt to put into objective form that which exists in most literature on the subject as the subjective impressions of educators and other writers interested in the deaf child. A comparison of the responses of deaf children with those of hearing children of the same age, on questions of general, social, school and home adjustment, shows the deaf child as more maladjusted than the hearing child. The deaf child's most marked maladjustment is found in the area of social adjustment.

The personality adjustment of the deaf child to the demands of a hearing world, is a problem as great as that of his economic independence. Deafness and its resulting speech handicap as well as limited language comprehension, affect the personality of the deaf. The writer's obvious understanding of these points is evidenced in her adoption of a personality inventory of such simple structure as to meet the restricted language background of the deaf child. It is shown also in her concluding statement that "there is need for more intensive research to ascertain the nature and relationships of factors underlying the personality adjustments of the deaf."

MARIE K. MASON

NOYES, ARTHUR P. *A Textbook of Psychiatry.* New York: Macmillan Company, 1936. viii+329 pp.

The field of education in psychiatry and mental hygiene for nurses is not crowded with adequate textbook material. Dr. Noyes has completely revised and reset his 1927 textbook so that it presents practically a new discussion of the subject. The point of view has been revised, also, in accordance with later research. The author attempts to present material which will be relevant for the nurse in general practice, as well as for the one engaged in either institutional or private-duty nursing of frank mental cases. His main emphasis is on the necessity of recognizing the part played in life adjustment, as well as in physical health by the milder forms of disorganization which are often not recognized as mental disorders at all. He recommends some experience in hospitals for the insane, supplemented by some instructional contact with an out-patient or mental-hygiene clinic.

In addition to chapters on the psychoses, which one traditionally finds in a textbook on psychiatry, there are chapters on mental hygiene, on psychiatric nursing, on psychoanalysis, and on the nurse's own relation to her profession. A large bibliography and a well-organized glossary add to the effectiveness of this very useful textbook.

EMILY L. STOGDILL

BUREAU INTERNATIONAL D'ÉDUCATION. *Annuaire International de L'Éducation et de L'Enseignement, 1935.* Genève: Bureau International d'Éducation, 1935. 446 pp.

This is the third volume of this international yearbook of education. The director of the Bureau which issues this series is the distinguished child psychologist, Jean Piaget. The volumes of the series bear a strong family resemblance to other educational yearbooks such as the American or the British, but the present number deals with a very long list of countries, forty-seven in all and, of course, deals with each only briefly. It offers, for each of these countries, arranged alphabetically from Albania to Yugoslavia, a page or two of statistics (for 1933–34), and from two or three to a dozen pages of text explaining trends. There is a general introduction and a report by Director Piaget upon the work of the Bureau of International Education at Geneva.

H. G. GOOD

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Review Courses

[*Continued from page 48*]

So with these conditions in mind, the friends of Freshmen in the Ohio State Department of Education and at Ohio State University attacked the problem at the request of Director Skinner three or four years ago. For those students who expect to go to college a half-unit and a unit were prepared to be taken in the senior year of the high school. They were worked out with exercises and assignments and with a state proficiency examination at the end. An intensive review of mathematics was included in the program. Exercises to improve reading skill and comprehension were constructed, and materials for a diagnostic survey of deficiencies in writing were developed. The syllabus and exercises were printed by the State Department and distributed to interested schools. Only students who needed the work were encouraged to take it.

Mr. Wood, who has charge of this project in the State Department, reports that last year about 4,000 handbooks were distributed to 264 schools. He says that probably more students took the courses than received the handbooks because sometimes single copies were used by more than one student.

What the effect of the project is upon the Freshmen's marks has not yet been ascertained. That is a study which should be made next year. But those concerned feel that the idea is a good one—both those who prepared the materials and the increasing number of high schools that are using them.

W.W.C.